[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-1059; Directorate Identifier 2013-NE-36-AD]

RIN 2120-AA64

Airworthiness Directives; Pratt & Whitney Canada Corp. Turboprop Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain Pratt & Whitney Canada Corp. (P&WC) PW120, PW121, PW121A, PW124B, PW127, PW127E, PW127F, PW127G, PW127H, and PW127M turboprop engines. This proposed AD was prompted by reports of fuel leaks at the interface between the fuel manifold and the fuel nozzle that resulted in engine fire. This proposed AD would require removal of the O-ring seal from the fuel manifold fitting. We are proposing this AD to prevent in-flight fuel leakage, which could lead to engine fire, damage to the engine, and damage to the airplane.

DATES: We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov and follow the instructions for sending your comments electronically.

- Mail: Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

- Fax: 202-493-2251.

For service information identified in this AD, contact Pratt & Whitney Canada Corp., 1000 Marie-Victorin, Longueuil, Quebec, Canada, J4G 1A1; phone: 800-268-8000; fax: 450-647-2888; Web site: www.pwc.ca. You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2013-1059; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the mandatory continuing airworthiness information (MCAI), the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (phone: 800-647-5527) is the same as the Mail address provided in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Kevin Dickert, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7117; fax: 781-238-7199; email: kevin.dickert@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2013-1059; Directorate Identifier 2013-NE-36-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this proposed AD. Using the search function of the Web site, anyone can find and read the comments in any of our dockets, including, if provided, the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You may review the DOT's complete Privacy Act Statement in the Federal Register published on April 11, 2000 (65 FR 19477-78).

Discussion

Transport Canada Civil Aviation, which is the aviation authority for Canada, has issued Canada AD CF-2013-29, dated October 4, 2013 (referred to hereinafter as "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

> There have been reported incidences of fuel leaks at the interface between the flexible fuel manifold and the fuel nozzle. On occasion, these events resulted in an engine fire on PW100 series engine installations. The data indicates that nearly all of the subject manifold fuel leaks were caused by inadequate B-nut torque application during installation, after maintenance work was performed on the fuel nozzle/manifold.
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> Sealing of the fitting connections between the fuel manifolds and the fuel nozzle adapters is achieved through conical metal-to-metal surface seating. An additional O-ring seal on the fitting was installed to arrest any fuel leak past the conical sealing surfaces. In-service experience has indicated that leakage past the sealing surfaces, as a result of improper torquing during installation of the manifold, may not be immediately evident until the failure of the O-ring seal allows the fuel to leak into the nacelle area.

Removal of the O-ring seal from the fuel manifold fitting is needed to prevent any fuel leak resulting from improper connection or torquing. We are issuing this AD to prevent in-flight fuel leakage, which could lead to engine fire, damage to the engine, and damage to the airplane. You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov by searching for and locating it in Docket No. FAA-2013-1059.

Relevant Service Information

P&WC has issued Service Bulletin No. PW100-72-21803, Revision No. 4, dated February 8, 2012. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

FAA's Determination and Requirements of This Proposed AD

This product has been approved by the aviation authority of Canada and is approved for operation in the United States. Pursuant to our bilateral agreement with Canada, they have notified us of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all information provided by Canada and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design. This proposed AD would require removal of the O-ring seal from the fuel manifold fitting to prevent in-flight fuel leakage resulting from improper connection or torquing, thus preventing engine fire, damage to the engine, and damage to the airplane.

Costs of Compliance

We estimate that this proposed AD would affect about 150 engines installed on U.S. airplanes. We also estimate that it would take about 2.5 hours per engine to perform the inspection or replacement required by this proposed AD. The average labor rate is $85 per hour. No parts are required. Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be $31,875.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress

charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

(1) Is not a "significant regulatory action" under Executive Order 12866,

(2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),

(3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Amend § 39.13 by adding the following new airworthiness directive (AD):

Pratt & Whitney Canada Corp.: Docket No. FAA-2013-1059; Directorate Identifier 2013-NE-36-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Pratt & Whitney Canada Corp. (P&WC) PW120, PW121, and PW121A turboprop engines with Post SB21610 configuration; PW124B, PW127, PW127E, PW127F, and PW127H turboprop engines with either Post SB21607 or Post SB21705 configuration, or both; and PW127G and PW127M turboprop engines.

(d) Reason

This AD was prompted by reports of fuel leaks at the interface between the fuel manifold and the fuel nozzle that resulted in engine fire. We are issuing this AD to

prevent in-flight fuel leakage, which could lead to engine fire, damage to the engine, and damage to the airplane.

(e) Actions and Compliance

Unless already done, during the next opportunity when the affected subassembly is accessible, but no later than 18 months after the effective date of this AD, remove the O-ring seal from the fuel manifold fitting.

(f) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, FAA, may approve AMOCs to this AD. Use the procedures found in 14 CFR 39.19 to make your request.

(g) Related Information

(1) For more information about this AD, contact Kevin Dickert, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7117; fax: 781-238-7199; email: kevin.dickert@faa.gov.

(2) Refer to MCAI Transport Canada AD CF-2013-29, dated October 4, 2013, for related information. You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov by searching for and locating it in Docket No. FAA-2013-1059.

(3) P&WC Service Bulletin PW100-72-21803, Revision No. 4, dated February 8, 2012, pertains to the subject of this AD and can be obtained from Pratt & Whitney Canada, using the contact information in paragraph (g)(4) of this AD.

(4) For service information identified in this AD, contact Pratt & Whitney Canada Corp., 1000 Marie-Victorin Blvd., Longueuil, Quebec, Canada, J4G 1A1; phone: 800-268-8000; fax: 450-647-2888; Web site: www.pwc.ca.

(5) You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Issued in Burlington, Massachusetts, on March 13, 2014.

Colleen M. D'Alessandro,
Assistant Directorate Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

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